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**Implementing Base  
Realignment and Closure  
Decisions In Compliance  
With The National  
Environmental Policy Act**

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## **Implementing Base Realignment and Closure Decisions In Compliance With The National Environmental Policy Act**

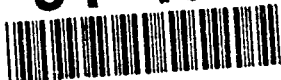
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May 1991

### **Abstract**

Signing the Records of Decision (RODs) for U.S. Army Base Realignment and Closure (BRAC) Environmental Impact Statements (EISs) has been impeded by modified proposed action, lack of environmental information, and unclear definition of responsibilities in the National Environmental Policy Act (NEPA) process. This policy analysis provides a framework to implement the spirit and intent of NEPA in accordance with BRAC mandates. Changes in U.S. Army force structure require base realignments and closures. These actions may not proceed without adequate implementation of NEPA. The issues and problems associated with implementing NEPA for BRAC are complex and difficult to define concisely. This policy analysis attempts to identify the underlying problems of BRAC and evaluates alternative strategies to overcome difficulties in preparing environmental analyses and documentation. These strategies focus on improving decision-making, NEPA flexibility, and the overall substantive quality of environmental analysis and documentation.

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# **1. Introduction**

## **1.1 Purpose**

The purpose of this paper is to examine better ways to attain the letter and intent of the National Environmental Policy Act (NEPA) process while accomplishing Base Realignment and Closure (BRAC) mandates. It is crucial that the NEPA environmental impact and analysis process (EIAP) operate within the context and in support of the base realignment and closure procedures. The primary goal of NEPA is to "foster excellent decision making," not to create paper work or delays (Council on Environmental Quality, 1979). This report examines alternatives and proposes attainable strategies to solve problems often encountered during base realignment and closure. Some of the problems described here are not unique to NEPA and BRAC, but occur in other proposed actions as well.

This paper presents a framework for decision makers to:

- \* Improve existing Environmental Impact Statements (EISs) so Records of Decision (RODs) may be signed, and the proposed actions proceed (See Appendix A for the Study Coordination and Approval form.)
- \* Comply with NEPA while implementing Army mission requirements
- \* Prevent impediments to future BRAC rounds.

## **1.2 Methodology**

The first step of the study process was to review the issues. NEPA experts and practitioners met on 19 October 1990 for a one-day symposium to define the problem and identify initial strategies. (See Appendices B and C.)

Second, the Army Environmental Policy Institute (AEPI) synthesized records of the session, and performed supplemental

investigations and analysis. An initial discussion paper, dated 16 January 1991, formulated a policy analysis and recommendations of the symposium participants' input.

Third, because policy analysis is an iterative process the AEPI staff incorporated later comments and investigations to produce a second draft dated 17 April 1991. After further staffing and discussion, this final paper was produced.

### **1.3 Problem Situation**

It is important to acknowledge a number of recognized axioms of policy analysis (Rondinelli, 1973).

- \* Policy problems are complex, and difficult to define concisely
- \* Each interested organization places emphasis on a different component of the problem or defines the whole problem in terms of the part
- \* Policy evolves from a process of political, inter-organizational conflict over a wide variety of values and interpretations of rationality
- \* Policy analysis is both a generator and a product of conflict.

Even under these imperfect circumstances, policy analyses do proceed.

The purpose of the October symposium was to uncover the underlying problems facing the Army in the base closure and realignment effort. Experts from the Army, academia, other federal agencies, and public interest groups (Appendix B has a complete list of participants) spent over half the session clarifying the problem definition to produce the following statement:

*Responding to a budgeting and strategic mandate to change its force structure, the Army staff has been developing realignment and closure proposals without the benefit of sufficient environmental information and criteria. These proposals are then examined under NEPA, when the environmental problems of the proposals are revealed. Alternatively, events change, requiring new proposals and the need to begin a new NEPA process. The Army lacks a flexible mechanism(s) for providing timely environmental information of appropriate sufficiency on potentially affected installations, so that the Army staff (or a new Commission) can develop and the public respond to a fully informed proposal.*

This statement does not completely represent the complex and interrelated quality of the problems. In addition, some of the problems described here are not unique to NEPA and BRAC, but occur in other proposed actions as well (Fee, January 1991). (For a summary of various views of the problem situation, the problems expressed by various individuals, see the Endnotes following this chapter.)

The issues appropriate to this policy analysis can be grouped into three major categories: managerial, methodological and technical.

### 1.3.1 Managerial

Managerial issues include resources (people and money), planning, scheduling, study process, inter-and intra-communication, and responsibilities. This paper discusses resource allocation, changes to the proposed action, NEPA interpretation, and proponenty and preparation.

### *Allocating Resources*

The organization responsible for the environmental impact analysis, documentation and mitigation (proponent) does not control the resources (Clark, February 1991). Proponents that control their own resources are better able to execute their responsibilities. In addition, resource control allows for greater accountability for implementing any mitigation program.

### *Changes to the Proposed Action*

Environmental impact analysis documents and records frequently require revisions as the proposed action changes (Adams, February 1991). Military force structure is currently evolving to reflect the world's changing geo-political conditions. BRAC is intended to restructure and streamline the military to meet future force structure and budget requirements. Due to rapidly changing world events (e.g., removal of the Berlin Wall and Operations Desert Shield/Storm) proposed closure and realignment actions continue to be either modified or canceled. When a proposed action changes between the initiation of the notice of intent (NOI) and the signing of the ROD in the NEPA process, documents must be revised, extending the environmental analysis process. As noted in the Fort Belvoir "Autopsy," "It was difficult for the proponent to determine when to 'freeze' the action for the purpose of analysis" (Fee, January 1991).

### *NEPA Interpretation*

Under the Base Realignment and Closure Act of 1988, NEPA does not apply to the decision to close or realign a base and move personnel and equipment. It applies only to those actions that carry out the closure or realignment. When one considers only the letter of the NEPA law (its procedural requirements) it can be perceived as a rigid detail requirement. In reality, there is much flexibility in creating an environmental analysis process that satisfies the spirit of NEPA (its substantive requirements). The perception of NEPA as strictly a procedural requirement leaves the decision maker few options when the proposed action changes between the NOI and the

ROD. However, statutory requirements are not inflexible and their goals are substantive, not procedural. NEPA provisions, (i.e., Section 102(2) C) should be seen as means to an end, and not as an end in themselves.

#### *Proponency and Preparation*

Army Regulation (AR) 200-2, Environmental Effects of Army Actions, defines a proponent as "the unit, element, or organization that is responsible for initiating and/or carrying out the proposed action." The proponent has the responsibility to prepare and/or secure funding for environmental documentation. AR 200-2 recommends that the proponent be the lowest-level decision maker. Ideally, this would place the proponent at the installation level, to ensure that the most accurate information is used, and that the professionals closest to and most familiar with military activities and the regional environment supervise the analysis and document preparation. However, the sensitive nature of base realignment and closure caused proponency to be assigned to the major Army commands (MACOMs) for BRAC I.

Army Regulation 200-2 further clarifies that the proponent may or may not be the preparer. In the BRAC context, the MACOMs have been the proponent, but HQDA often assigned preparation to the regional Corps of Engineers district offices. Many of the district offices in turn contracted out the preparation tasks.

Another component of a proponency concern is addressing cumulative impacts. NEPA requires that an agency look at its proposed action in the context of other proposals in the area. Impacts of individual realignment actions may be trivial when considered in isolation, but may be quite significant when considered altogether.

#### 1.3.2 Methodological

Methodological issues include how to conduct the environmental impact analysis process (EIAP). Specific methodological concerns involve reuse and issue definition.

### *Reuse*

Environmental considerations for installation reuse have not been consistently examined in closure environmental documents even though military base closure may leave the adjacent civilian community with significant economic and environmental uncertainty. Early in the closure process, there should be an effort to involve the local community in developing generic reuse scenarios based upon inherent environmental suitability.

### *Issue Definition*

The EIAP does not consistently address significant environmental issues, particularly in BRAC (Brown, February 1991). There is neither consistency among environmental documents, nor is there consistency within one particular environmental document. This makes BRAC environmental documents less accurate and less useful than they should be. Overall, environmental proposed and alternative actions. The tight deadlines for preparing BRAC environmental documents can make it difficult for the preparer to collect relevant baseline data to tailor the environmental document to address pertinent issues.

#### 1.3.3 Technical

Technical issues pertain to the EIAP systems and techniques, and consist primarily of obtaining adequate information for environmental analysis. Installations have inadequate environmental baseline data (Brown, February 1991). This issue is not unique to the BRAC process. The quality of an environmental analysis is largely information-dependent. Therefore, preparers and proponents need to obtain current, relevant environmental baseline information to perform the analyses that will affect later decisions.

## **Endnotes**

### **Views of the Problem**

- \* Changing geo-political and domestic conditions are driving changes in force structure
- \* Not predecisional since alternatives are not considered
- \* Revisions are required when proposed action changes
- \* BRAC is a departure from normal Army property releases under the Federal Property Disposal Act
- \* Closure will not occur if there is inadequate funding to remediate hazardous waste sites
- \* Environmental documents do not adequately address the proposed action
- \* Inadequate environmental baseline data
- \* Inconsistent substantive quality of environmental analysis and documents
- \* Connected actions of closure and realignment should be related to cumulative environmental effects
- \* Limited public scoping and review
- \* Army review process is long and cumbersome
- \* Role of proponent and preparer needs to be clearly defined
- \* Proponent should control resource allocation for environmental analysis and documentation
- \* Unclear about how to address the environmental considerations of reuse
- \* Unrealistic self-imposed time schedule for BRAC NEPA documents
- \* Poor communication between proponents, contractors, and reviewers
- \* Funding is sporadic



## **2. Setting**

### **2.1 Historic Perspective**

In the 1960s, under President Kennedy's direction, Secretary of Defense McNamara developed and implemented the most extensive base realignment and closure program in U.S. history. This was done with minimal consultation with the Military Services or Congress. The administration announced the closures while Congress was recessed. In response, during the next session, Congress passed legislation designed to involve itself in any Department of Defense (DoD) base closure program. President Johnson vetoed the proposal, and this set up a continuing conflict between the Executive and Legislative branches. Base closures, however, continued throughout the 60's.

In the 1970s, Congress thwarted base closure attempts by continually attempting to regulate the process. President Carter eventually approved legislation requiring DoD to notify Congress that a base is a candidate for realignment or closure; to prepare local economic, environmental, and strategic consequence reports; and to wait 60 days for Congress' response. This effectively halted base closures (Commission, December 1988).

In 1983, The President's Private Sector Survey on Cost Control (The Grace Commission) concluded that the national defense could be improved and made more cost-effective with an efficient military base structure. The Grace Commission recommended that a non-partisan, independent Commission be appointed to study this issue. In May 1988, the Secretary of Defense chartered the Commission on Base Realignment and Closure to recommend facilities in the U. S. and its possessions for realignment and closure.

The BRAC Commission found that the military value of various installations had decreased. Private commercial and residential development had grown closer to many military installations. At the same time, technology had increased the capability of modern weapon systems, which in turn often required more train-

ing area. These two factors have made many installations less efficient, targeting them for closure. Other considerations involve the Army's future needs. The Commission examined trends and future installation requirements. It predicted that future training will become more land-intensive. Improvements in military weapon systems and larger training exercises will continue to require more training land than in the past.

In its December 1988 report, the Base Realignment and Closure Commission stated a primary concern with many installations' capability to fulfill their defined missions. The report advised that closure plans must consider a facility's availability, quality, quality of life, and community support. Although the Commission set no cost savings goals, the 1988 report estimated that base closures could yield an annual savings of \$693.6 million and a 20-year savings of \$5.6 billion (net present value).

## **2.2 BRAC Environmental Evaluation Requirements**

In 1988, the Secretary of Defense requested and received exemptions to certain provisions of NEPA (Commission, December 1988). Congress agreed that NEPA did not apply to decisions of the Defense Secretary's Commission on Base Realignment and Closure. Therefore, during the decision phase, the Commission did not have to consider NEPA while selecting installations for closure or realignment. The Commission did, however, incorporate environmental considerations as one of its criteria for decision making.

Under the Base Realignment and Closure Act, during the implementation phase, the Defense Secretary was not required to consider:

- \* The need for closing or realigning a military installation selected for closure or realignment by the Commission
- \* The need for transferring functions to another military installation selected as the receiving installation

- \* Alternate military installations to those selected for closure and transfer.

NEPA does not apply to the **decision** to close or realign a base, but it does apply to the **implementation** of those decisions. The Base Realignment and Closure Act limits civil action (lawsuit) against the government on environmental grounds. It states that any act required by NEPA, but not carried out, cannot be brought under civil action later than 60 days after the action.

### **2.3 The Status of Base Realignment and Closure**

The Assistant Secretary of the Army for Installations, Logistics, and Environment (ASA, IL&E) defined the terminology and status of various Army BRAC efforts in a 27 February 1991 briefing before the Military Installations and Facilities subcommittee of the House Armed Services Committee. The Commission's decision, announced in December 1988, as mandated by Public Law 100-526 is referred to as BRAC I. This affects 133 Army installations: 76 will close, 57 will realign (Livingstone, February 1991). Although a complete procedural NEPA process was waived by Public Law, the Commission did employ an environmental methodology to support the decision making process (Lozar, December 1988). To implement BRAC I decisions, 27 environmental documents have been prepared: 12 EISs, 14 Environmental Assessments (EAs) and one Programmatic EA (Table 2-1).

On 29 January 1990, Secretary of Defense Cheney announced proposals for additional realignments and closures. This is referred to as BRAC II. There is no exemption to NEPA in BRAC II and alternative actions must be evaluated in the environmental analysis and documentation process. These proposals reflected the Army's initial transition into a smaller, more streamlined organization. This announcement proposed reducing the Army from a 5 corps, 28 division force to a 4 corps, 23 division force. BRAC II did not include any Outside Continental United States (OCONUS) realignments or closures.

BRAC III was announced to meet Congressional concerns about OCONUS realignment and closures. OCONUS installations were not included in BRAC II because at the time, Conventional Forces Europe Treaty negotiations were ongoing and were expected to cover the European force structure. This element was eliminated from the talks and therefore, on 18 September 1990, Secretary Cheney announced drawdowns in overseas forces. The BRAC III proposals included closure or reduction of operations at 113 Army facilities overseas. BRAC III was the initial transition to a smaller force overseas.

**Table 2-1 BRAC Environmental Documentation Milestones (Livingstone, February, 1991)**

<b>Environmental Impact Statement</b>	<b>Completion Date</b>
Fort Dix	Jul 90 (A)
Fort Devens-Fort Huachuca	On Hold
Presidio of San Francisco	May 91
Fort Sheridan	Feb 91 (A)
Fort Douglas	Mar 91
Fort Meade	Jul 91
Army Material Technology Laboratory	Sep 91
Jefferson Proving Ground	Sep 91
Cameron Station-Fort Belvoir	Jun 91
Umatilla-Navajo-Fort Wingate-Hawthorne AAP	Sep 91
Pueblo Depot Activity	Sep 91
Lexington-Bluegrass Army Depot	Sep 91
<b>Environmental Assessment</b>	<b>Completion Date</b>
Hamilton Army Airfield	Mar 91
USARC Gaithersburg	Jun 91
New Orleans Military Ocean Terminal	Apr 91
Tacony Warehouse	Apr 91
Fort Des Moines	Apr 91
NG Bennett	Oct 91 (A)
NIKE Kansas City 30	Apr 91
DMA Herndon	Jul 91
Coosa River Storage Annex	Feb 91
Kapalama	Apr 91
Cape St. George	Apr 91
Indiana AAP	Mar 91
Pontiac Storage	Mar 91
NIKE Aberdeen	Mar 91
<b>Programmatic Environmental Assessment</b>	<b>Completion Date</b>
Stand-Alone Housing	Mar 90 (A)

(A) = Actual

## **2.4 Analysis of BRAC I**

As noted in the Analysis of the Preliminary Draft Environmental Impact Statement PDIES) for Fort Belvoir Base Realignment and Closure (BRAC), commonly referred to as the "Autopsy," "the BRAC program, because of its complexity (both in terms of numbers of players and actions) political visibility, and timeline requirements, [has] strained the Army's ability to execute the NEPA process as smoothly and efficiently as desired" (Fee, 1991). The Base Closure and Realignment Act of 1988 (Public Law 100-526) requires the Army to begin implementing the Commission's December 1988 (BRAC I) decisions for base realignment and closure by 30 September 1991 and to complete these actions by 30 September 1995. The Act also requires that before implementation begins, the Army must consider the environmental consequences of the implementation proposal with respect to the provisions of NEPA.

As BRAC implementation proposals change, environmental analysis and documentation in progress must be modified. The rigorous nature of the environmental analysis process often causes the modifications to the analysis and documentation to lag behind. Estimates suggest that approximately \$10 million may have already been invested in BRAC I environmental analysis and documentation. At an estimated cost of \$50,000 per EA, and \$200,000 to \$800,000 per EIS, costs accumulate quickly (Miller, December 1990).

The February 1989 Implementation Plan for BRAC I assigned roles and responsibilities to various organizations, including the MACOMs, Office of the Chief of Engineers (OCE), Assistant Chief of Engineers Base Realignment and Closure Office (ACE BRACO), Directorate of Management Base Realignment and Closure Office (DM BRACO), BRAC Steering Committee, Corps of Engineers Divisions and Districts, and the Office of the Assistant Secretary of the Army for Installations, Logistics, and Environment (OASA, IL&E) (Hamilton, February 1989). Proponency was assigned to the MACOMs, however, the responsibility for prepar-

ing environmental analyses and documentation was assigned through channels to the Corps of Engineers district offices to take advantage of their expertise and experience. To speed the preparation, funds were made available through ACE BRACO to the districts. ACE BRACO is responsible for participating in the review process, and for providing guidance on priority dates. DM BRACO is responsible for participating in the review process, and for providing guidance to the MACOMs. The Steering Committee is responsible for providing guidance to the MACOMs, and for interpreting evolving policy and guidance. The OASA (IL&E) is the final decision maker with authority to sign the ROD. Staff members from this organization were also involved in the review process.

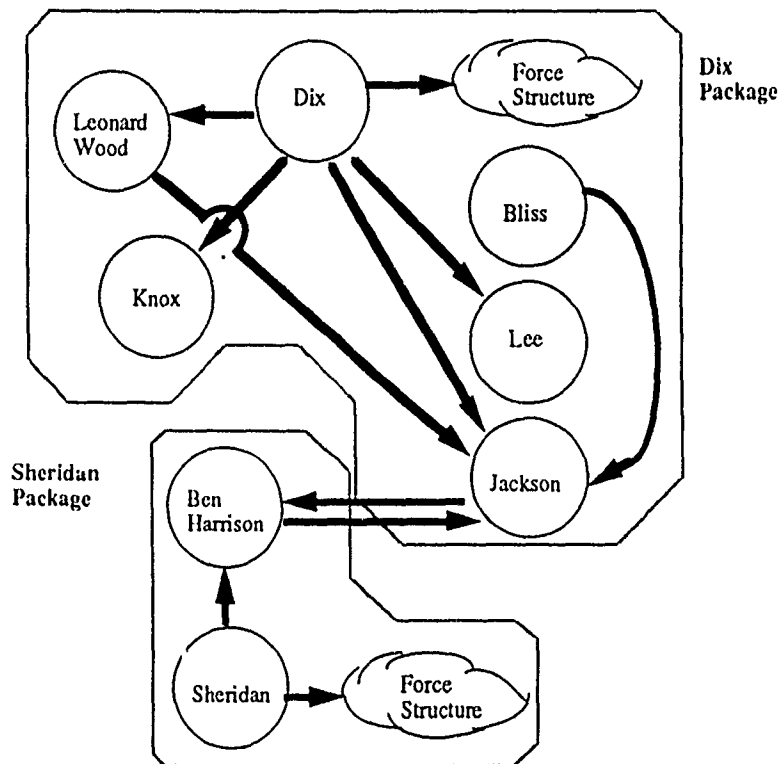
In BRAC I, each MACOM's role was unclear. Information often flowed unevenly within Headquarters Department of the Army and from Headquarters to the MACOMs. To some, the districts served as contract officers who monitored environmental analysis and documentation preparation, adding yet another coordination and management layer to the process (Fee, January 1991, Yentzer, February 1991). Installation environmental offices had no official role in environmental analysis and at times were overlooked. The data for analysis resides at the installation.

To satisfy the applicable NEPA requirements, Environmental analysis on the implementation proposals began immediately following the December 1988 BRAC I announcements. This environmental analysis predicts the effects of the proposed action relative to "no action," that is, the conditions present if the installation remains in its current status, and to examine alternative ways to implement the action (e.g., closure or movement of units or activities). The environmental document recommends ways to offset negative impacts, but does not evaluate alternative closure or realignment decisions. There is limited discussion of whether or not the action will be implemented because the action is required by law. Discussion involves only the best method to implement the action, the effects of the action on a variety of issues including the local community and the environment, and how negative impacts may be mitigated.

The quality of environmental baseline information controls the quality of environmental analysis. This information is directly related to the time and effort given to data collection. For example, due to a lack of baseline data, one Draft Environmental Impact Statement (DEIS) incorrectly concluded that there were no endangered species on post. Another EIS frequently referred to a "reported cemetery" on post, but never documented its existence.

Also, BRAC I environmental documents are "packaged," to group connected actions and related movements as shown in Figure 2-1. Even when an installation sends units or activities to many different installations, there are only a few pages devoted to impacts at the receiving installation. Often there is limited analysis of cumulative impacts upon receiving installations.

Figure 2-1 Packaging Example





## **2.5 BRAC 90 and Beyond**

To avoid past problems, the Army needs new strategies to implement NEPA for BRAC. While many of these are common problems that occur in preparing non-BRAC environmental analyses and documents, they complicate the BRAC process as well.

NEPA implementation for BRAC is a dynamic process that may be re-defined for each round of base realignment and closure. Public Law 101-510, The National Defense Authorization Act for Fiscal Year (FY) 1991, requires biennial BRAC Commissions, where decisions are referred to as BRAC 91, 93, or 95. As in the Base Realignment and Closure Act of 1988, these commissions do not have to consider NEPA in decisions to select installations for closure or realignment. Based upon recent legislative experience, future rounds of BRAC will probably also be exempt from evaluating such alternatives. Therefore, environmental documents for BRAC actions only describe alternative implementation scenarios, and the environmental impacts and mitigation solutions. This approach has made existing environmental documents appear inflexible when one proposed action modifies another.

If the future BRAC environmental analysis process is to comply with the intent of NEPA, then it must adequately address alternative ways to implement Commission recommendations.

### **3. Alternatives**

Every policy analysis must consider alternative policy choices. Alternatives should minimize undesirable side-effects, recognize and address internal political realities, and produce information that will assist in further evaluations and decisions (MacRae, 1985). Once alternatives are articulated and analyzed, they should be judged by a stated evaluative criteria, to provide a framework for future policy decisions.

This chapter describes alternative policy choices for the Army's BRAC EIAP. The alternatives analyzed in this chapter build upon those introduced at the symposium (listed in Appendix C). These alternatives represent a range of possible options that have been generated throughout the analytical process of this policy study.

#### **3.1 Criteria**

When presented with several options, a decision maker needs some basis for choosing among them. What types of results does the decision maker expect from a policy? What outcomes does the decision maker value? How can the desired outcome be maximized, or undesirable consequences be minimized? These values can be expressed in terms of criteria for making a decision. When the criteria are articulated, they become the principle factors for decision makers to choose the best policy. The policy alternatives can be analyzed and evaluated according to the criteria, providing a framework in which the decision maker can make an informed choice based on expected results of various policy choices. For the environmental impact analyses of base realignment and closure implementation, there are three desirable criteria: BRAC-NEPA congruency, quality, and responsiveness.

##### **3.1.1 BRAC - NEPA Congruency**

The first criterion for policy choices is that base realignment

and closure requirements should be congruent with the NEPA process. In spite of misperceptions during BRAC I, these two legal requirements are neither contradictory nor at cross purposes (Conrad, February 1991). NEPA can and should be used within the context of BRAC to achieve better decisions. Any policy choice that can enhance BRAC and NEPA coordination would be valuable.

### 3.1.2 Quality

The second criterion for policy alternatives is quality. The value of environmental analyses produced under NEPA is directly proportional to the sufficiency, clarity, accuracy, and overall quality of the analysis and the resulting documentation. As stated before, NEPA is intended to produce excellent decisions, not create burdensome paperwork. A valuable policy choice is one which motivates quality throughout the environmental analysis process, and overcomes the perception that NEPA is an after-the-fact obstacle to federal actions.

### 3.1.3 Responsiveness

Finally, responsiveness is an essential criterion for making policy choices. Because of the sensitive nature of the BRAC process and other economic or military pressures, a BRAC environmental policy must be responsive, i.e., it must be timely and flexible. This is important to Army leadership, which must implement decisions in a dynamic milieu.

## 3.2 Analysis

Alternatives in this paper are grouped into the three categories of concern: managerial, methodological, or technical. Each category includes a status quo option that is to maintain the present course of action. Following each option, is a graphic depicting which, if any, of the three criteria that option meets. The heavily bordered boxes indicate that the criterion is satisfied. At the end of this

chapter, these options are summarized in Table 3-1.

### 3.2.1 Managerial

Managerial alternatives are those that affect resource and responsibility coordination. These include managing time, people, and money; managing the process; and responsibilities of the proponent, preparer, reviewers, and monitors. These alternatives include maintaining the status quo, building upon the existing implementation plan, creating a BRAC environmental analysis support team, coordinating with the installation master plan, separating sending and receiving actions, separating discrete implementation elements, packaging the implementation actions more broadly, and increasing environmental personnel.

#### *Status Quo*

The status quo managerial policy alternative is to continue with the current management method for the Army's overall BRAC environmental analysis process. This includes maintaining MACOM proponentcy (Walker, October 1989), channeling resources for environmental analyses through the Corps of Engineers for preparation (Hamilton, February 1989), using the BRAC Steering Committee to clarify procedural guidance (Shannon, January 1989), and packaging implementation actions into logical groups of connected actions (Shannon, January 1989). As discussed in various BRAC "Lessons Learned" conferences sponsored by OASA, IL&E, the current conditions require improved coordination between BRAC and NEPA. Also, the current conditions have sometimes resulted in inconsistent decisions, which do not meet the decision maker's needs in a timely way. Therefore, this option does not fully satisfy any of the criteria.

Status Quo	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Implementation Plan*

One policy option is to build upon the framework of the existing implementation plan. As stated in Chapter 2, the Office of the Secretary of the Army issued an implementation plan in February 1989 to manage the BRAC I implementation (Hamilton, February 1989). Similar plans will need to be issued to describe implementation of future BRAC actions. These implementation plans should further define: proponentcy, resource allocation, staffing, the review process, and disposal and remediation obligations and responsibilities. Clarifying ambiguities in the previous implementation plan will improve the quality of the BRAC environmental process, and make the process more responsive by clearly outlining responsibilities and expectations.

Implementation Plan	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Support Team*

As a policy alternative, the Army leadership could establish a BRAC environmental support team, an advisory group that could provide technical advice as needed throughout the environmental analysis process. The BRAC I Steering Committee represented various organizations and was able to clarify guidance informally when procedural questions arose. However, it was also used to solve substantive problems identified in the review process of environmental documentation. Critical and constructive technical review is valuable early in the environmental analysis process and a support team could provide this service. Such a team could do much to provide congruency between the NEPA process and BRAC requirements, by serving as the interface or interpreter between Army mission and environmental requirements. It also has potential for improving the quality of analysis and documentation, and contributing to greater responsiveness, therefore rates highly on all three criteria. Fully implementing the support team strategy may require reallocating some existing resources. However, implementing a support team to ensure quality control in the earliest stages of a draft EIS is anticipated to reduce delays and costs

during the BRAC NEPA process.

Support Team	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Master Plan Coordination*

Another policy alternative is to coordinate the installation master plan with environmental analyses and documentation generated in response to BRAC actions. AR 200-2, states that environmental considerations included in Army environmental analyses and documentation should be integrated into installation master planning documents and other component management plans. The installation master plan gives the installation commander a tool to manage and develop installation real property resources (i.e. land and facilities) to accomplish assigned and projected missions. The master plan is intended to provide orderly installation development, and to promote future installation viability. EISs can be excellent sources of information to describe future changes and corresponding environmental consequences at the installation. Therefore, integrating an EIS into the installation master plan can improve the quality of the analyses and recommendations of the master plan by implementing the recommendations and mitigation measures of the EIS. This direct link between the two documents will help to make the purpose and intent of NEPA congruent with BRAC requirements.

Master Plan Coordination	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Separate Sending and Recieving Action*

Another policy option is to conduct separate environmental analysis at the sending and at the receiving installation. This would help to manage the complex set of BRAC actions while remaining sensitive to the purpose of BRAC environmental impact analysis: to evaluate the environmental effects in a given region of a proposed action, and to propose mitigation measures to offset negative impacts. This option logically correlates BRAC requirements with the NEPA process, and would yield better quality

analyses of cumulative environmental effects at the receiving installations. It would also allow the analysis and documentation of closing and realigning to proceed independently, thereby making the process more efficient.

Separate Scheduling and Reviewing Actions	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Separate Discrete Implementation Elements*

An alternative to the current packaging of connected actions is to separate the overall action into smaller, discrete elements. For example, each element of an action at a closing installation could require several environmental documents. Elements might include: moving activities away from the installation, ceasing military activity at the site, requiring remediation and restoration, disposing of real property to the private sector, and reusing real property. This would create much more environmental documentation, but each document would be smaller and more focused. If the environmental analysis and documentation for one component took longer to complete than another, it could proceed relatively independently without interfering with the progress of other components. Separating to this extreme may create more complexities than necessary, and may not effectively address cumulative impacts. However it would provide some congruency between the NEPA process and BRAC requirements, and therefore satisfies that criterion.

Separate Discrete Implementation Elements	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Package Implementation Actions Broadly*

Conversely BRAC actions could be packaged even more broadly than was done for BRAC I. This programmatic approach may involve only one or two environmental documents for an entire BRAC round, and would encompass many analyses for the various component actions at all the affected installations. This would be an extremely complex management task and would require close coordination of many interrelated sub-actions. This

require close coordination of many interrelated sub-actions. This alternative would also provide some congruency between the NEPA process and BRAC requirements, and therefore satisfies that criterion.

Package Implementation Actions Broadly	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Increase Environmental Staffing*

To improve quality control, policy guidance could increase the number of authorized staff positions at Corps of Engineers district offices, MACOMs, U.S. Army Toxic and Hazardous Materials Agency and also at the installations. This may provide adequate staff to prepare and review environmental analyses and documentation, so that the BRAC environmental requirements could be met in a more timely manner. However, this guidance may create managerial problems regarding hiring and training and may leave those offices underfunded after the BRAC requirements are completed.

Increase Environmental Staffing	BRAC-NEPA Congruency	Quality	Responsiveness
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## 3.2.2 Methodological

Methodological policy alternatives include the Army's approaches to environmental impact analysis studies associated with implementation of base realignment and closure decisions. These alternatives include: maintaining the status quo, framing the proposed action more broadly, using boundary analysis, doing a carrying capacity analysis, examining the environmental considerations of reuse, writing programmatic EISs, and tiering the BRAC environmental analysis process.

### *Status Quo*

The methodological policy option to maintain the status quo means continuing with the current Army BRAC environmental impact analysis study methodology, by conducting environmental



analyses based on the precise personnel numbers, timing and location specified in the BRAC action. The current method also leaves gaps where adequate baseline data do not exist for a thorough environmental analysis (Clark, February 1991). This leaves the possibility that some documentation may not be adequate, since the proposed action may change during the course of preparation, without corresponding changes in the analysis and the documentation. This option does not satisfy any of the three criteria for a desirable policy choice for meeting the environmental requirements of BRAC.

Status Quo	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Framing the Proposed Action*

Since the definition of the proposed action is the foundation for the entire environmental analysis, it should be carefully framed. If the action is defined too narrowly, there is no flexibility for small changes. If the proposed action is defined too broadly, the public will not know the nature of the proposed action. Proposed actions for BRAC environmental analyses should be framed broadly enough to allow for possible changes, while still being fair to the public and giving accurate information about the nature of the action. This option satisfies all three criteria. It coordinates NEPA's obligations to the public and BRAC's military requirements, produces better quality documents, and allows more responsiveness and flexibility.

Framing Proposed Action	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Boundary Analysis*

A third policy alternative is to frame the proposed action for environmental analyses using a boundary analysis technique. The analysis describes the sensitivity of an impact category, and shows the perimeters where impacts change significantly. The boundary analysis focuses on one proposed action, but describes a closely related range of actions and their corresponding impacts. This

allows greater congruency between the BRAC requirements and NEPA process. This option also improves the responsiveness of the environmental document since it allows preparers to quickly identify the significance of changes to the proposed action. It can also improve the quality of the analysis, since it shows where a particular analysis still applies to a changed proposed action.

Boundary Analysis	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Carrying Capacity Analysis*

Another policy alternative for preparing BRAC environmental analyses is to use a carrying capacity method. Carrying capacity is the "maximum rate of resource consumption and waste discharged that can be sustained indefinitely in a defined planning region without progressively impairing bioproductivity and ecological integrity" (Rees, 1988). This method allows environmental analyses to examine the full range of activities or uses that natural and human systems can accommodate. Analysts can then evaluate various realignment or closure scenarios with relative ease. This alternative satisfies all three criteria by using the NEPA process to inform the BRAC process, by providing realistic baseline information, and by expediting later phases of analysis by laying a foundation for determining natural and human resource carrying capacity. Implementation would require considerable time and money.

Carrying Capacity	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Environmental Considerations for Reuse*

Consistent examination of environmental considerations for reuse is yet another alternative. Cleaning up environmental hazards and potential reuse of Army facilities are sensitive issues for the community surrounding an installation scheduled for closure. While it is not possible for the Army to specify a definitive reuse plan for the installation, it is important for the community to understand that the Army will meet its obligation to remediate environmental hazards existing on its land. Because it has managed

the land and facilities for many years, the Army also can provide information regarding environmental considerations and inherent suitabilities for reuse. Local communities and the DoD Office of Economic Adjustment (OEA) can then use this information to develop specific reuse plans. This alternative satisfies all three criteria by coordinating the BRAC closure and disposal requirements with the public involvement responsibilities and other NEPA requirements. It makes a more sufficient document that includes environmental considerations for reuse, and enhances the document's responsiveness to the public's concerns and decision maker's needs.

Environmental Considerations for Reuse	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Programmatic EIS*

Another policy approach to the BRAC environmental analysis process is to use a programmatic EIS to address the broad environmental consequences of the entire BRAC round. This programmatic EIS would help to incorporate environmental considerations in the early planning stages of proposed base realignments and closures. It would also serve as a supporting document for the site-specific environmental documents by investigating major issues, and allowing the site-specific EIS to focus on issues specific to the subsequent actions. This alternative also satisfies all three criteria by integrating environmental considerations early in the BRAC process, providing useful information regarding sensitive environmental issues, and addressing overall concerns at the macro level, so they need not be repeated at the site-specific level.

Programmatic EIS	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Tiering the BRAC Environmental Analysis Process*

A tiered method for environmental analysis in BRAC could proceed from the macro to the micro level, each tier building on the previous one. Tiering includes creating a programmatic EIS for the entire round of BRAC, a carrying capacity analysis for each

receiving installation to predict the impacts of alternative realignment scenarios, and doing a site-specific environmental analysis focusing on the pertinent environmental issues of the proposed sending or receiving action.

Tiering	BRAC-NEPA Congruency	Quality	Responsiveness
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### 3.2.3 Technical

Technical policy alternatives have to do with systems, technologies, and tools to be used in the environmental impact assessment study process. These alternatives include: staying with the status quo, using the Economic Impact Forecast System (EIFS), the Environmental Early Warning System (EEWS), the Integrated Training Area Management (ITAM) Program and developing an integrated automated data system.

#### *Status Quo*

The status quo technical policy option is to continue using systems and tools for the environmental analysis process on an ad hoc basis. Where made available to preparers, various systems were employed in the environmental analysis process for BRAC. However, of all the systems, only EIFS was used uniformly and consistently throughout the Army's environmental analysis processes. The General Accounting Office commended the Army for its consistent use of EIFS for examining socio-economic impacts of base realignment and closure. However, more consistent techniques in other areas of environmental impact analyses are needed. Randomly applying different analytical techniques and tools produces documents with inconsistent quality and responsiveness and that are not uniform. It also may demonstrate a lack of sensitivity to the unique requirements of NEPA in the BRAC context.

Status Quo	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Economic Impact Forecast System (EIFS)*

The Army has already achieved a consistent use of EIFS as a tool in the socio-economic analysis of Army base realignment and closures. This system contains a predictive impact model and demographic data on the county level, nationwide. Continued use of this system will ensure quality analyses that are responsive to the decision maker's needs.

Economic Impact Forecast System	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Environmental Early Warning System (EEWS)*

Using the EEWS for major installations throughout the BRAC environmental analysis process provides another alternative. EEWS is a computerized system that evaluates environmental impacts of realignment scenarios. With modifications, the EEWS could be used to accommodate the environmental information requirements for BRAC and also to provide greater flexibility in evaluating alternative realignment actions. These modifications may require significant resources to implement.

Environmental Early Warning System	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Integrated Training Area Management (ITAM) Program*

Another technical policy option is to fully implement the ITAM Program Army-wide. This program provides a technique to improve baseline information at installations, and a systematic method to determine the carrying capacity of training lands. Implementing this policy alternative meets the quality and responsiveness criteria by allowing a more flexible analysis with greater baseline information.

Integrated Training Area Management Program	BRAC-NEPA Congruency	Quality	Responsiveness
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### *Integrated Automated Data System*

Another policy option is to develop a new, integrated, automated data system that would focus specifically on the environ-

mental data and analysis requirements of BRAC. This system could reside on a mainframe computer at a centralized facility responsible for preparing all BRAC environmental documents. Staffing and funding requirements would be significant, to develop the system and collect requisite baseline data for system input. This system would ensure consistent analysis and compatible levels of baseline data across all Army installations, specifically for BRAC.

Integrated Automated Data System	BRAC-NEPA Congruency	Quality	Responsiveness
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Policy alternatives relative to the evaluation criteria described in Section 3.2 are summarized in Table 3-1. Those alternatives which satisfy at least two of the criteria are further explored and developed into strategies in Chapter 4.

**Table 3-1 Policy Alternatives Relative to Evaluation Criteria**

	NEPA-BRAC Congruency	Quality	Responsiveness
<b>Managerial</b>			
Status Quo			
Implementation Plan			
Support Team			
Master Plan Coordination			
Separate Sending and Receiving Actions			
Separate Discrete Implementation Elements			
Package Implementation Actions Broadly			
Increase Environmental Staffing			
<b>Methodological</b>			
Status Quo			
Framing Proposed Action			
Boundary Analysis			
Carrying Capacity			
Environmental Considerations for Reuse			
Programmatic Environmental Impact Statement			
Tiering			
<b>Technical</b>			
Status Quo			
Economic Impact Forecast System			
Environmental Early Warning System			
Integrated Training Area Management Program			
Integrated Automated Data System			

Key:  Criteria Satisfied  Alternative Does Not Satisfy Criteria

## **4. Strategies**

### **4.1 Overview**

Chapter 3 analyzed alternatives to address the managerial, methodological and technical concerns applied in the BRAC-NEPA process. The following sections describe the framework for those strategies which meet at least two of the criteria outlined in Chapter 3. This framework is summarized at the end of this chapter, in Table 4-3.

### **4.2 Managerial**

#### **4.2.1 Implementation Plan**

Future BRAC implementation plans may effectively address many managerial concerns by explicitly defining NEPA responsibilities, determining the fund allocation and streamlining the review process in the implementation plan. Stating these issues in the BRAC implementation plan would provide a stronger framework for implementing the NEPA process.

#### ***Role of Proponent and Preparer***

It is sometimes difficult to determine who is responsible for the content and quality of an environmental document when the proposed action is complex. Under NEPA, the organization that is responsible for an EIS is referred to as the proponent. The proponent may also be the preparer but in most cases it is not. The proponent coordinates environmental document preparation, and ensures that it complies with NEPA and other environmental regulations. The proponent also takes responsibility for the document's overall content and accuracy. In BRAC, the issue of proponency is exceptionally complex.

Valuable input on environmental matters may be overlooked since the installation is neither the proponent nor the preparer. Installations are aware of site specific issues and have important



baseline information that may be valuable in the environmental analysis. Having installations participate in the scoping, information collection, and review steps of the NEPA process will help to identify the critical issues in a proposed action and to use available installation data. The proponent can make it possible for the closing or receiving installations to actively participate in the NEPA process. The proponent should coordinate installation participation with the preparer by clearly defining the tasks and working relationship of all involved parties, at the beginning of the NEPA process.

#### *Allocating Resources*

The agency responsible for overall quality (proponent) should control the funds to prepare environmental analysis and documentation. This will allow direct control of preparer selection, the scope of work, and time frame for completion. The proponent should accept the responsibility for overall quality and accuracy of the environmental document. If substantive or procedural problems are identified, the proponent should ensure that the preparer correct them as soon as possible.

#### *Internal Review*

The internal review process of BRAC environmental documents should also be defined in the implementation plan. In BRAC I, approximately one third (34%) of the total elapsed time spent preparing BRAC environmental documents was devoted to internal review (Conlin, March 1991). A streamlined review process in the implementation plan could speed the whole BRAC NEPA process. A more efficient review process should:

- \* Avoid concurrent review
- \* Provide critical review of environmental documents in an early draft stage
- \* Provide for an open dialogue between preparers and proponents throughout the EIAP

- \* Include a systematic process to reconcile review comments.

The implementation plan could also reference additional guidance for reviewing Army EAs and EISs (Fittipaldi, 1980).

#### *Value of Implementation Plan Considerations*

The implementation plan should provide a clear direction for NEPA compliance. To develop consensus in the BRAC NEPA process, all affected parties should participate in developing future BRAC implementation plans. Support from proponents, reviewers, and preparers for the implementation plan will provide a strong framework for implementing the BRAC NEPA process. In addition, clearly defining the review process, fund allocation, time schedules, and agency responsibilities will help foreclose future management and coordination concerns.

#### 4.2.2 Support Team

To provide better quality control in the BRAC environmental analysis and documentation, a dedicated interdisciplinary BRAC Environmental Support Team should be created for each BRAC round. This team of specialists in biology, resource management, air and water resources, hazardous waste management, economics, military operations, and military master planning would be on call to review draft records and documents and provide technical assistance to preparers when requested. The number of support teams would depend on the number of BRAC actions occurring in each round, and members could consist of contractors and/or temporarily assigned Army military and environmental professionals.

#### *Value of Support Team*

The Executive Environmental Steering Committees (EESC) have addressed substantive problems found in the review process of BRAC environmental documents. The BRAC Environmental Support Team would differ from EESC by providing early EIAP

quality control to identify and address problems before the environmental document is finalized and forwarded up the chain of command. Inadequacies would be identified in existing documents before the end of the review process, thus preventing costly delays and revisions. The Support Team would not act as either preparer nor proponent, but would advise the preparer in developing a thorough and accurate environmental document.

#### 4.2.3 Master Plan Coordination

For both closing and receiving installations, the EIS provides critical information about future changes and their environmental consequences including: sensitive natural areas, environmental hazards, and reuse alternatives. In addition, the master plan may provide valuable information for scoping the issues and describing the affected environment. Integrating the EIS into the installation master plan will help to implement the recommendations in the environmental document. Also, incorporating the EIS's predictions and mitigation measures into the installation master plan would provide a systematic method to post-audit an EIS to ensure that mitigation measures are effectively implemented.

##### *Value of Master Plan Coordination*

Army Regulation 200-2 (Section 2-6. e.(4)) requires all environmental documents to be integrated into installation master plans. This coordination between BRAC environmental analysis and master planning is mutually beneficial. It helps provide a framework to implement and evaluate mitigation actions for closure or realignment, and conversely provides valuable master planning information on the local environs for personnel conducting the BRAC environmental analysis.

#### 4.2.4 Sending and Receiving

Existing environmental documents "package" many interrelated actions together. Although base closure and realignment may

appear to be a discrete package, they can be separated into logical impacts and consequences at the **sending** installation, and effects at the **receiving** installation. A sending installation may be completely closed, or may only lose some of its units or activities to realignment. A receiving installation may gain units or activities due to realignment from elsewhere. A closing installation is necessarily a sending installation, but a sending installation may be either realigning, or closing. Consequently, sending and receiving installations do not necessarily correlate. The sending installation may send units to many different installations, and the receiving installations may gain activities from several sources. (See Figure 2-1.)

At the sending installation, there are several issues to consider:

- \* Unit or activity realignment (movement away from the sending installation)
- \* Closure (if applicable)
- \* Environmental clean-up and restoration
- \* Disposition of real property (including land and all improvements)
- \* Inherent reuse options and alternatives.

At the receiving installation, the issues can be divided into:

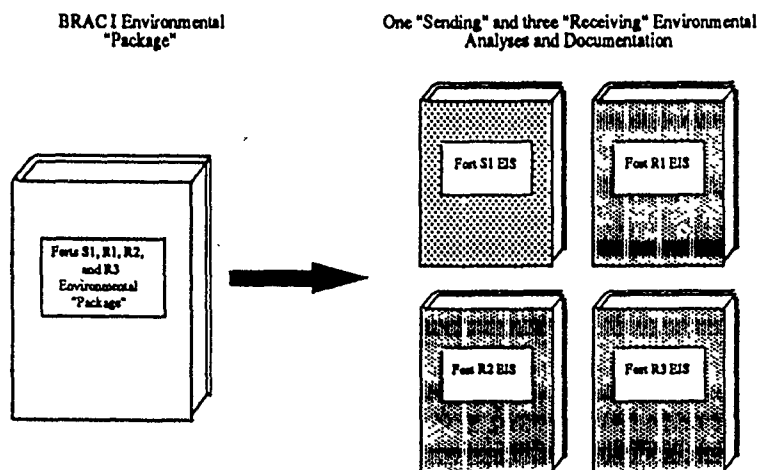
- \* Unit or activity realignment (movement into the receiving installation)
- \* Construction to accommodate new activities or functions
- \* Environmental impacts of new functions, equipment, personnel and facilities.

Given this characterization of actions and impacts, a strategy for streamlining future BRAC environmental documents is to divide the actions into sending and receiving categories. Each sending and receiving location can have its own separate NEPA documentation. This allows the environmental analyses and data collection to be performed for each proposed action site.

#### *Applying Sending and Receiving Strategy to BRAC*

If there is an insurmountable impasse with BRAC I, it may be desirable to use this strategy. To apply the sending and receiving strategy to BRAC I, some documents will need to be slightly modified, as shown in Figure 4-1. Environmental documents for the sending installations should be adequate, and at or near completion. These documents should analyze the impacts and corresponding mitigation measures of moving activities from the installation. If the installation is also closing, the document should examine the impacts and corresponding mitigation measures of ceasing military operations at the site, real property disposal, and developing reuse alternative scenarios. Since this document was prepared on behalf of the MACOM proponent of the affected sending installation, the existing analyses and documents should be accurate and complete.

**Figure 4-1 Applying Sending and Receiving Strategy to BRAC I**



Receiving installation environmental documents should evaluate the movement of units or activities to the installation and any construction necessary for new activities. These documents will require more original work than sending installation documents because the data in the sending installation documents included only a framework, some baseline data, and environmental impact information about the receiving installation. Such analyses and supporting documents should be forwarded to the receiving installation's Corps district office for preparing the receiving installation documents.

Alternatives to this strategy include taking no action and redoing the inadequate environmental documents. Both alternatives may postpone the signing of RODs past the 30 September 1991 deadline because documentation may be incomplete. The sending and receiving strategy allows the best use of resources already invested in current environmental documents and provides an opportunity to sign BRAC I RODs before the deadline if there is an impasse.

#### *Tailor Sending and Receiving Environmental Documents*

Again, the NEPA process is designed to improve the quality of decision making, and not create unnecessary paper work or delays. Distinguishing significant from insignificant environmental issues in a EIS is essential for good decision making. By tailoring sending and receiving environmental documents to the proposed action, decision makers may efficiently determine the most significant environmental issues of a proposed action.

The National Environmental Policy Act of 1969 declared a set of environmental obligations for "all agencies of the Federal Government," but as yet, Section 102(2)(C) of the Act is the only obligation enforced. As a result, the courts hold EIS preparers strictly accountable for their procedure without regard for environmental consequences. Lynton Caldwell notes that this creates an impression of NEPA as an essentially procedural statute, and encourages environmental document preparers to adopt a "shotgun approach" and address a range of issues that may or may not be

pertinent to the proposed action. According to Caldwell, this is common in federal EISs, where preparers wish to comply with NEPA procedural aspects to avoid the threat of litigation. For BRAC I, only one environmental document has been challenged in court, and it was successfully defended (Greczmiel, February 1991).

Environmental analyses should focus on content before procedure: on the significant issues of a proposed action and on its predicted environmental consequences, stated clearly in lay-person terms. All interested parties should be encouraged to participate in the scoping process for an EIS to allow the public to express their concerns in the EIS decision making process (AR 200-2, Section 7-2) and, the Army to monitor and address public concerns about a BRAC action. By actively responding to public concerns, the Army can acknowledge the importance of public input in identifying environmental issues to be included in the environmental document.

#### *Applying Strategy to Future BRAC Rounds*

By applying a sending and receiving strategy to future BRAC rounds, receiving installations could focus on the cumulative impacts of additional personnel and equipment. Closing installations could focus on the inherent environmental suitability of their land for reuse. Coordination and sequencing of sending and receiving actions could be accomplished through a programmatic EIS as described in Section 4.3.5.

#### *Value of Sending and Receiving Strategy*

This sending-receiving installation strategy has value to the Army in several ways. First, if used to alleviate impasses in BRAC I, it allows the Army to recover much, if not most, of the resources invested to date in the BRAC I environmental analysis process. Second, the sending and receiving strategy allows the environmental analysis to focus more closely on the site of the action, rather than on a diverse package of interrelated actions. Finally, and most importantly, this strategy allows the sending installation to concen-

trate on real property disposal and inherent reuse alternatives, and the receiving installation to concentrate on cumulative impacts, and on the best way to manage and plan for anticipated realignments.

### **4.3 Methodological**

#### **4.3.1 Framing the Proposed Action**

The first fundamental step in preparing a NEPA analysis is to define the proposed action accurately, and with the proper degree of precision. BRAC proposed actions have been accurate. However, they may have been defined too precisely to accommodate changes in proposed actions during the NEPA process. Flexibility is achieved by defining broad ranges of actions, and then evaluating their corresponding environmental consequences, especially in defining the proposed action for a receiving installation. For example, rather than defining the purpose and need as "realignment of D Company, 39th Engineer Battalion" where the Company has 148 people and associated equipment, the purpose and need should be defined more broadly, such as: "realignment of an engineering battalion company," and impacts described for a typical company.

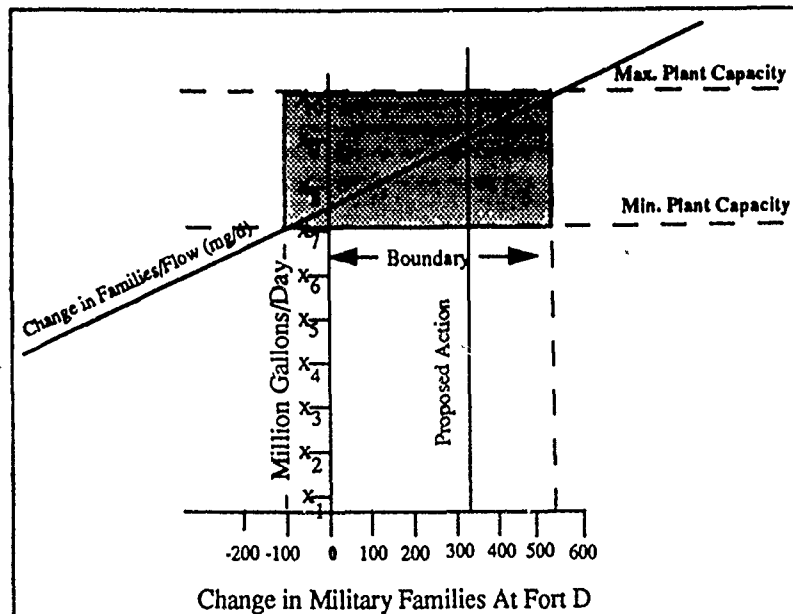
#### **4.3.2 Boundary Analysis**

When a proposed action changes during the NEPA process, the boundary analysis determines if more environmental analysis is required to identify the impacts of the new proposed action. A boundary analysis can help determine if the new proposed action will have more severe environmental impacts than the original proposed action. A boundary analysis shows a range of proposed actions with similar impacts. It also describes the sensitivity of an impact category, and shows the perimeters at which the impacts change significantly. The boundary analysis assumes if a new proposed action's impacts are close enough to those of the original action, then further environmental analysis is not needed.



For example, Fort D recently constructed a new wastewater treatment plant with the capacity to treat wastewater effectively in the range of  $x_7$  to  $x_{10}$  million gallons per day (mg/d). Fort D is also scheduled to receive an additional 325 military families from a realignment and has performed an environmental analysis of the realignment and found that the maximum designed capacity of the installation wastewater treatment plant would not be exceeded. By preparing a boundary analysis as Figure 4-2 illustrates, changes in a proposed action can be quickly addressed to determine if further environmental analysis is required. If the proposed realignment changed to 400 families, the boundary analysis reveals that the environmental consequences of the treatment plant fall within an acceptable plant capacity boundary and would not be significantly different from the original proposed action. Thus, no new analysis is required.

Figure 4-2 Sample Boundary Analysis for Wastewater System Impact Category



### *Value of Boundary Analysis*

A site-specific cumulative environmental analyses using the boundary analysis method affords the receiving installation three advantages: (1) cumulative impacts of receiving units from several different installations can be evaluated, (2) the documentation is more flexible, should a realignment decision change, and (3) resources may be saved by only preparing new environmental analysis for significantly changed proposed actions.

For existing BRAC I environmental documents facing delay because proposed actions have changed, the boundary analysis technique can determine whether more analysis is really needed. This strategy could speed completion of BRAC I environmental documents, and in future BRAC rounds, should be introduced early in the environmental analysis process.

#### 4.3.3 Carrying Capacity Analysis

### *Determining Carrying Capacity*

A carrying capacity environmental analysis for each receiving installation specifies the carrying capacities for natural and human resources and predicts the environmental impacts of alternative realignment scenarios. Receiving installations may incur significant environmental impacts if the carrying capacity of natural or human resources is exceeded. In ecological terms, any level of development or economic activity that does not exceed the carrying capacity of the installation and surrounding environs is sustainable. Carrying capacity can also refer to man-made resources such as schools, or other public services that may become less effective if over extended or used.

Increasing troop numbers at installations due to consolidation actions exerts additional pressure on natural systems, training areas, housing, and public services. For example, increased frequency and intensity of training area use or expansion of training areas can destabilize soils, threaten natural habitat, create added noise problems, and threaten historically significant resources. Receiving installations must also ensure that installation and public services (e.g., highway capacity, power plants, waste disposal,

schools, fire, and police) can accommodate the increase in military and civilian personnel. To adequately predict the impacts on a receiving installation, the following must be known for each topical area:

- \* The additional direct, indirect and any other impacts of the proposed action
- \* Existing conditions
- \* The carrying capacity of natural or human resources.

For instance, to determine the impact of an endangered species for a receiving action requires knowing:

- \* The total projected impact on usable habitat. Habitat may be directly destroyed or disrupted through a change in use
- \* The total habitat area of the species
- \* Type and area of habitat required to maintain a sustainable population.

With this information, the EIS preparer can effectively predict the consequences of a receiving action. However, this information must be gathered and organized so it can be readily used by EIS preparers and ultimately presented to decision makers.

#### *Predicting Impacts for Alternative Scenarios*

Since the proposed action may change due to internal politics or logistics, the methodology for preparing documents must be made more flexible. This can be done by predicting the environmental impacts for ranges of possible realignment scenarios. Each receiving installation should prepare a carrying capacity environmental analysis that describes the cumulative environmental impacts of several alternative proposed actions in addition to predicting the impacts of individual realignment actions.

For example, if Fort A were designated as a receiving installation, the environmental impacts could be evaluated for a range of additional military units by identifying the carrying capacity of

corresponding natural and human resources. (See Table 4-1.) This would allow the BRAC NEPA process the flexibility to evaluate a broad range of realignment actions in one document, even if proposed actions change or if additional realignment actions occur over time. In addition, this methodology allows decision makers to roughly determine the carrying capacity for environmental attributes at receiving installations. For example, if the carrying capacity for endangered species appears to be 5000 additional personnel at hypothetical Fort A, the evaluation should also consider the equipment and training requirements of additional units.

**Table 4-1 Example Summary of Receiving Installation Impacts**

Impacts of Personnel Change				
Attribute \ Increase	0-499	500-999	1000-4999	5000-9999
Endangered Species	No Problem	No Problem	No Problem	Problem
Noise	No Problem	No Problem	Problem	Problem
Wetlands	No Problem	Problem	Problem	Problem
Floodplains	No Problem	No Problem	Problem	Problem
Landfills	No Problem	No Problem	Problem	Problem
Air Pollution	No Problem	No Problem	No Problem	Problem
Schools	No Problem	No Problem	Problem	Problem

#### *Value of Carrying Capacity Analysis*

Installation closures and increased training area requirements of modern weapon systems exert additional pressures on training and operational areas at receiving installations, possibly resulting in an increase in the number of training areas and the intensity of their use. To protect sensitive natural areas, the receiving installation carrying capacity environmental analysis should focus on both direct and indirect impacts of alternative realignment actions for both human and natural resources.

#### 4.3.4 Environmental Considerations for Reuse

Determining the inherent reuse suitability of Army lands and facilities should begin with examining the broad range of options. The value of Army lands and facilities should be evaluated to determine their natural and cultural significance and their inherent suitabilities. Based on these suitabilities, these considerations can be incorporated into the closure environmental document to help ensure future land-use compatibility.

According to the Base Realignment and Closure Acts of 1988 and 1990, the Army has the authority to dispose of closing installations. The responsibility of the General Services Administration (GSA) to determine the most appropriate reuse is effectively transferred to the Army in BRAC. The Army is responsible to document and evaluate the disposal impacts and the range of future uses of closing installations. The closure environmental document should provide guidance to ensure that future use of installation property is not compromised by a potential environmental hazard (e.g., a hazardous waste site or a leaking underground storage tank) and will not damage sensitive natural areas.

##### *Seek Public Involvement*

Recommendations for Army land reuse and management requires the involvement and support of local planners, government officials, special interest groups, and the general public. Unless installation land is directly transferred to other public agencies, local or regional planning agencies will greatly influence the installations' reuse through comprehensive planning and zoning. In addition, public involvement is necessary to ensure the environmental integrity of closing installations. These environmental considerations for reuse should augment the development of a separate reuse plan. OEA is a community assistance agency that will aid the installation and local community in evaluating reuse alternatives, and will provide funding to help prepare reuse plans.

### *Protect Sensitive Natural Areas*

Army installations contain unique natural and cultural resources. As stewards of these valuable national resources, the Army has the responsibility to ensure that reuse of closing installations preserves the resources on or adjacent to the installation. The 1991 DoD Appropriations Act mandates that the Secretary of Defense will establish a "Legacy Resource Management Program" to identify and manage significant biological, geophysical, and cultural resources on DoD land. Within the Senate Report on Legacy, priority is given to identify Legacy lands for all closing or realigning installations. By law, recommendations must be made to transfer Legacy lands on BRAC installations to other federal land management agencies with a "broad resource protection mandate."

An implementation strategy for Legacy has not yet been completed and no specific guidance is available for BRAC installations. However, closing environmental documents should recommend that sensitive natural areas, such as wetlands or estuaries, be protected after the installation is closed. The environmental document should also recommend strategies for managing and preserving significant natural and historical resources. For example, buffer areas may need to be created around sensitive natural areas to ensure the integrity of wildlife habitat. The EIS could also recommend that natural areas be sold to responsible organizations such as the Nature Conservancy, or transferred to responsible public agencies such as the U.S. Fish and Wildlife Service, National Park Service, or state conservation agencies.

### *Identify Environmental Hazards and Damaged Natural Areas*

The Army is legally responsible to identify, evaluate and if necessary, remediate potential environmental hazards e.g. hazardous or toxic substances that have been released into the environment (AR 200-1, Section 6-4). Army installations prepare environmental compliance assessments every two years. These assessments recognize the absence or availability of data and/or studies which might help identify and evaluate potential environmental hazards. The closure environmental document should take advan-

tage of any information from the recent assessment. Mitigation plans for major environmental problems such as contaminated soils, or leachate problems from landfills should be clearly summarized in the closure EIS.

#### *Value of Environmental Considerations for Reuse*

Incorporating environmental considerations for reuse into the closure EIS will help to smoothly transfer the property and to help ensure the future environmental integrity of the closing installation. Identifying the environmental conditions in the EIS will also help the surrounding communities develop a reuse plan and will prevent closure delays by promoting cooperation between the installation and the local community.

#### 4.3.5 Programmatic EIS

The purpose of preparing a programmatic EIS is that it addresses a program's or a policy's broad environmental consequences. It acts as a supporting document for site-specific environmental documents. This allows site-specific EISs to focus on issues specific to the subsequent actions and to summarize the issues discussed in the programmatic statement. The programmatic EIS also helps introduce environmental matters in the early planning stages of a proposed program action. The programmatic EIS should speed the BRAC environmental documentation process by giving focus to the site-specific environmental documents. It would also help coordination between sending and receiving installations by defining all proposed BRAC actions for each round.

#### *Guidance for Preparing a BRAC Programmatic EIS*

Army Regulation 200-2 (Section 2-6) encourages the proponents to tier their environmental analysis for major policy actions. The first tier of environmental analyses for a major federal action is a programmatic EIS. A programmatic EIS should be prepared for each BRAC round to clearly articulate the purpose and objectives of that round, and to identify and discuss the common environmen-

tal issues for base closure and realignment. The general public should be invited to participate in the scoping and review process for the programmatic EIS, although it should be made clear that alternative locations for closure and realignment will not be evaluated in the EIS. Public participation should focus on the environmental consequences of closure/reuse and on managing resources on receiving installations.

Site-specific information found using the EEWS would allow decision makers to identify those installations that would be sensitive to change. (See Section 4.4.2 for further discussion of EEWS.) For instance, a receiving installation with training areas already being used at near-capacity levels and having sensitive natural areas would be labeled as "sensitive for receiving additional units." EEWS can help prepare a matrix summarizing the environmental sensitivity of closing and receiving installations. (See Table 4-2.)

**Table 4-2 Example Summary of Environmental Sensitivity**

Environmental Area Installation	Endangered Species	Noise	Wetlands	Floodplains	Landfills	Air Pollution	Schools	Training Area Capacity	Utilities
Ft. A	Very Sensitive	Very Sensitive			Sensitive	Very Sensitive			Very Sensitive
Ft. B		Sensitive	Sensitive						
Ft. X			Sensitive				Very Sensitive		
Ft. M		Very Sensitive		Sensitive					
Ft. D				Sensitive					
Ft. Y					Sensitive	Very Sensitive			
Ft. J									

Very Sensitive
Sensitive
Not Sensitive



### *Value of a Programmatic EIS for BRAC*

There are two primary benefits of preparing a programmatic EIS for BRAC. First, it encourages environmental considerations to be clearly expressed early in BRAC decision making. An EEWS generated table, such as Table 4-2, can be developed to evaluate environmental sensitivity (i.e., likelihood of significant environmental impact) of candidate installations in a programmatic EIS. This would provide decision makers with a useful source to evaluate the environmental considerations of realignment scenarios.

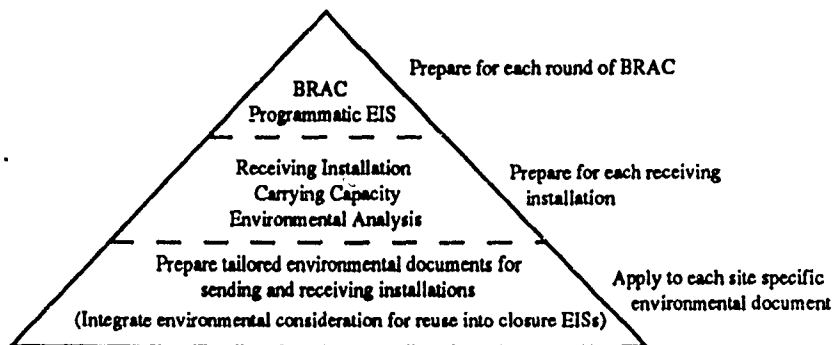
Second, a programmatic EIS would encourage tailoring site-specific EISs to environmental sensitive areas. Preparing a programmatic EIS may also ensure that common environmental considerations are made public in a programmatic document. Preparing programmatic documents may even streamline the whole BRAC NEPA process by allowing environmental documents to focus on the site-specific issues of closure or realignment (Wathern, 1988). Implementing a BRAC programmatic EIS would require an office of the Headquarters Department of the Army (HQDA) to serve as proponent of the programmatic document. The Corps of Engineers or a contractor could be the actual preparer and programmatic document preparation could take approximately nine months. However, tiering the environmental assessment process would streamline the BRAC NEPA process and may provide a net savings in time and resources for future BRAC rounds.

#### 4.3.6 Tiering

##### *Three Levels of Environmental Analysis*

The Army is encouraged to tier environmental documents to eliminate repetitive discussions and to focus on the actual issues pertinent to decision makers at each level of environmental analysis (AR 200-2, Section 2-6 c1). By creating a tiered environmental assessment methodology (Figure 4-3) using strategies already presented in this chapter, BRAC environmental documents can be both tailored to the proposed action, and flexible enough to address many policy changes.

Figure 4-3 Tiering the BRAC EIS Process



The first tier of environmental analysis is to prepare a BRAC programmatic EIS. This document would lay out the common environmental issues of each BRAC round, and support site-specific EISs. The second tier of environmental documentation would be to prepare a carrying capacity environmental analysis for each receiving installation. Environmental documents for individual receiving actions need only articulate the proposed action and reference the identified impacts. If a proposed realignment action changed, the carrying capacity analysis for the receiving installation could be used to quickly determine the impacts of the new action. The third tier of the environmental analysis process would be to tailor sending and receiving environmental documents to address the significant environmental issues of a proposed action. At closing installations, this would involve integrating environmental considerations for reuse into the closure EIS. When used together in a tiered approach, these strategies provide a comprehensive framework for implementing the BRAC NEPA process.

#### *Value of Tiering*

Improved decision making, flexibility, resource savings, and improved quality are benefits of tiering BRAC environmental documents. The programmatic EIS can provide decision makers

with pertinent information to evaluate the environmental sensitivity of closing and realignment. Flexibility is achieved by preparing carrying capacity analysis to determine environmental impacts for ranges of realignment scenarios. The BRAC NEPA process can be streamlined by addressing common environmental issues with a programmatic document and allowing the sending and receiving documents to focus on the site-specific problems.

#### **4.4 Technical**

##### **4.4.1 Economic Impact Forecast System (EIFS)**

Economic impacts of BRAC on local communities can be significant and will continue to be one focus of BRAC environmental documents. EIFS is already a widely accepted analytical database and forecast model to evaluate the economic impacts of Army actions. EIFS has been used extensively in the BRAC NEPA process with a high degree of success. Forecast model output can be compared to regional economic history to determine the significance of the closure or realignment action.

This success with EIFS makes it appropriate to continue the systems use for future BRAC environmental analyses. Planned EIFS improvements will increase its capabilities to provide more value to the BRAC process. These improvements should include: refining capabilities to define regions of influence, locating additional data sources, developing a second tier for additional site-specific economic analysis and developing better guidance for using EIFS.

##### **4.4.2 Environmental Early Warning System (EEWS)**

EEWS is designed to determine the environmental impacts on installations for realignment actions. EEWS has already been used to incorporate environmental considerations into screening criteria for BRAC I (Lozar, December 1988). Using the system requires identifying the realigning installations and either the

specific units that will be moved or the general numbers and types of units that will be relocated. By identifying the type of unit being realigned, the system can determine the environmental impacts for the equipment, training requirements, and mission of a unit. After the user inputs the required information, the system analyzes installation specific data, (e.g., endangered species, available training area, school capacity) to determine the proposed action's environmental sensitivity for 14 topical areas:

- |                      |                            |
|----------------------|----------------------------|
| * Housing            | * Endangered species       |
| * Coastal zones      | * Noise                    |
| * Schools            | * Floodplains              |
| * Maneuver areas     | * Landfills                |
| * Smokes/obscurences | * Petroleum/fuels          |
| * Ranges needed      | * Historical/archeological |
| * Utilities          | * Office space.            |

For each "topic" area identified above, a more detailed summary can be obtained within the system. For instance, a detailed summary of a "problem" topic area (endangered species) would be:

- \* Type of species
- \* Population size
- \* Percent of installation for species habitat
- \* Seasonal occurrences
- \* Potential for recovery
- \* Human tolerance
- \* Population parameters
- \* Federal and state protection status
- \* Degree of threat.

EEWS will not replace a site-specific analysis to determine risks for environmental hazards such as ground water contamination. However, it will identify topical areas where problems may exist, and it will guide a more site-specific analysis. The EEWS system also facilitates "what if" analyses to determine the potential environmental impacts of proposed realignment actions. EEWS

allows the user to quickly predict and evaluate the impacts of various realignment and closure alternatives in BRAC decision making. (Appendix D shows an example output from EEWS.)

Implementing EEWS for BRAC would require several system modifications. First, the system would need to be downloaded onto a personal computer and made more "user-friendly" to allow installation personnel to use it. Second, installation environmental information not currently available on the system would have to be collected and added to the database. The EEWS covers most Forces Command (FORSCOM) installations; other major Army installations would have to be added to the system (Appendix D contains a list of installations on EEWS). In addition, the system's information on existing installations may need to be updated. Installations that are proposed for realignment or closure should be given priority for being added to EEWS.

The updated EEWS would be invaluable for evaluating baseline conditions and predicting the environmental impacts of realignment actions. It would allow greater flexibility in environmental documents by determining the environmental impacts of alternative realignment scenarios. In addition, it would provide HQDA decision makers with the ability to quickly evaluate the environmental consequences of alternative realignment scenarios.

#### 4.4.3 Integrated Training Area Management (ITAM)

ITAM provides a systematic method to determine the carrying capacity of training lands. ITAM also provides maintenance, rehabilitation, and a management system to schedule training, based on the condition of the land, soils, flora, and fauna. ITAM is also being integrated with the Geographic Resource Analysis Support System (GRASS) to provide a computerized spatial environmental database. Updating the EEWS could be augmented with the Army-wide implementation of systems like ITAM and GRASS.

#### 4.5 Strategy Summary

The following table summarizes and provides suggested values for each of the strategies discussed in Chapter 4.

**Table 4-3 Overview of Strategies**

Strategy	Value
<b>Managerial</b>	
Implementation Plan	<ul style="list-style-type: none"> <li>• Defines NEPA responsibilities</li> <li>• Efficient review process, fund allocation, time schedule</li> </ul>
Support Team	<ul style="list-style-type: none"> <li>• Quality control early and throughout in the NEPA process</li> </ul>
Master Plan Coordination	<ul style="list-style-type: none"> <li>• Integrates relevant information from Master Plan and BRAC environmental document</li> <li>• Mitigation and monitoring</li> </ul>
Separate Sending and Receiving Actions	<ul style="list-style-type: none"> <li>• Addresses cumulative impacts at receiving installation</li> <li>• Focuses environmental analysis on site-specific issues</li> <li>• Assists in signing BRAC I RODs</li> </ul>
<b>Methodology</b>	
Framing Proposed Action	<ul style="list-style-type: none"> <li>• Greater document flexibility when proposed action changes</li> </ul>
Boundary Analysis	<ul style="list-style-type: none"> <li>• Determines if additional environmental analysis is required when a proposed action changes</li> </ul>
Carrying Capacity	<ul style="list-style-type: none"> <li>• Determines impact significance</li> <li>• Evaluates direct/indirect impacts</li> <li>• Evaluates cumulative impacts</li> </ul>
Environmental Considerations for Reuse	<ul style="list-style-type: none"> <li>• Facilitates environmental compatibility after closure</li> </ul>
Programmatic EIS	<ul style="list-style-type: none"> <li>• Evaluates common environmental issues early in BRAC planning process</li> <li>• Encourages tailoring of site-specific environmental analysis</li> </ul>
Tiering	<ul style="list-style-type: none"> <li>• Streamlines BRAC EIAP</li> <li>• Allows site-specific EISs to focus on issues specific to the proposed action</li> </ul>
<b>Technical</b>	
EIFS	<ul style="list-style-type: none"> <li>• Standardized and proven system to forecast BRAC economic impacts</li> </ul>
EEWS	<ul style="list-style-type: none"> <li>• Identifies sensitive environmental issues</li> <li>• Aides in carrying capacity analysis</li> </ul>
ITAM	<ul style="list-style-type: none"> <li>• Determines environmental sensitivity of Army training areas</li> </ul>

## 5. Implementation

### 5.1 Implementation Considerations

Publishing and distributing this paper will not guarantee that these strategies will be adopted into policy. Simply acknowledging issues or concerns seldom assures commitment to their solution. The need remains to mobilize a coalition of support, to resolve conflicts, and to gain consensus. As with any political interaction, there may be a time lag before these conditions are met (Rondinelli, 1973). Anticipating implementation pitfalls must be part of the policy analysis process. Few policies are self-executing and most policies, even simple ones, require a great deal of effort to be implemented. Policy makers usually do not implement policy themselves, but rely on implementers to carry out their policies. The Institute will assist in developing implementation strategies and will work with policy implementers.

This paper discussed many strategies for increasing the value and usefulness of environmental analysis and documentation within the BRAC process. In fact, it should be acknowledged that various Army offices are already implementing several of the recommended strategies. This policy analysis also compliments the report, *Base Realignment and Closure "How-to" Manual for Compliance with The National Environmental Policy Act* being prepared to provide additional guidance for BRAC NEPA documentation. The following suggestions are intended to assist with implementing these and other recommended strategies Army-wide.

First, identify an implementer. The commitment to improve the substantive quality of environmental documents already exists in the Army. However, an implementer can serve as an advocate for the preferred strategies. The implementer ensures that strategies for improving the NEPA process are understood and implemented at all levels of the BRAC decision making process. The candidate should be a person or persons who value the recommendations and hold a stake in the BRAC planning and implementation process.

Second, utilize research laboratories to provide necessary assistance. Several recommendations rely upon the Army environmental research laboratories becoming actively involved. Carrying capacity methodologies, boundary analysis techniques, and environmental baseline data identification/collection will require the Army's best environmental scientists. Baseline data, information systems and methodologies may already exist, so the gaps may be not as great as originally discussed at the symposium. Further, these scientists are often well networked with other government and private scientists where information flows more informally and often more rapidly than through normal channels.

Third, to institutionalize the implementation strategies, a policy letter signed by the ASA (IL&E) is urged. This will confer official recognition, adoption, and broad distribution throughout the Army. This brief policy letter, signed by the ASA (IL&E) will incorporate by reference the preferred strategies conceived and presented in this study. In addition, supplemental instructions could be written to support the environmental impact analysis process.

Further, carefully study the feasibility of the proposed strategies and understand what will be necessary to carry them out. One feasibility model focuses on the degree of consensus among groups involved in or affected by the proposed strategies and the magnitude of change that the proposed strategy represents (Steiss, 1980). Those strategies that have high consensus/low change present few problems in implementation. On the other hand, those with low consensus/high change may be the least feasible. Ascertaining strategy feasibility should permit limited resources to be allocated to those strategies with the highest payback. One systematic approach used to analyze implementation feasibility is presented in Table 5-1.



**Table 5-1 Implementation Evaluation**

Rank each alternative on a scale of 1-5 for consensus and change. Then add the rankings of consensus and change to receive a total score to assess the feasibility for implementing each strategy.

Strategy	Consensus					Change Required					Total
	Low	Mod.		High	Low	Mod.		High			
	1	2	3	4	5	5	4	3	2	1	
Managerial											
Implementation Plan											
Support Team											
Master Plan Coordination											
Sending and Receiving											
Methodological											
Framing Proposed Action											
Boundary Analysis											
Carrying Capacity											
Environmental Consideration for Reuse											
Programmatic EIS											
Tiering											
Technical											
EIFS											
EEWS											
ITAM											

## 5.2 Timing

The alternative strategies discussed in this chapter have different time requirements for preparation and application. These alternative strategies address both existing BRAC I environmental documents and future BRAC rounds. The boundary analysis and sending/receiving strategies provide two techniques that can be applied to BRAC I environmental documentation that will help alleviate constraints to signing EIS RODs by the 30 September 1991 deadline. These suggestions along with those discussed in Chapter 4 are also intended for implementation in future BRAC rounds. A proposed framework for implementation is summarized in Table 5-2.

Table 5-2 Application Timing

Strategy	Timing					
	BRAC I	Future rounds planning stage	After let is made public	Scoping	Early in the EIS draft	When proposed action changes
<b>Managerial</b>						
Implementation Plan		⊕				
Support Team					⊕	
Master Plan Coordination					⊕	
Sending and Receiving	⊕	⊕				
<b>Methodological</b>						
Framing Proposed Actions					⊕	
Boundary Analysis	⊕					⊕
Carrying Capacity					⊕	⊕
Environmental Considerations for Reuse					⊕	
Programmatic EIS			⊕			
Tiering			⊕	⊕		
<b>Technical</b>						
EIS				⊕		
EEWS		⊕		⊕		
ITAM				⊕		

## **6 Summary and Conclusion**

### **6.1 Summary**

The strategies presented in this paper outline ways to attain the letter and intent of the NEPA process while accomplishing BRAC mandates. Strategies focus on implementing the NEPA environmental impact analysis process within the context and support of the base realignment and closure procedures. These strategies provide a framework for decision makers to:

- \* Improve existing EISs so their RODs may be signed, and the proposed actions proceed
- \* Comply with NEPA while implementing Army Mission requirements
- \* Prevent impediments to future BRAC rounds.

Many of the issues and concerns identified in this policy analysis are interrelated. After synthesizing and evaluating the many complex issues, three broad areas of concern were identified for this policy analysis to address: managerial, methodological, and technical. Chapter 3 developed and evaluated alternatives for each area. Chapter 4 discussed those strategies that achieved at least two of the three evaluation criteria.

### **6.2 Conclusion**

The preferred strategies discussed in Chapter 4 met at least two of the BRAC NEPA evaluation criteria: congruency, quality, and responsiveness. In addition, they specifically address managerial, methodological, and technical concerns. These strategies can support existing BRAC I environmental documents and future BRAC rounds. For example, the boundary analysis technique, and sending and receiving strategy provide an opportunity to sign the

RODs of BRAC I EISs by making the best use of invested resources. These strategies may also be implemented with the others outlined in Table 5-2 to improve future BRAC decision making and overall environmental documentation and analysis quality. These strategies also:

- \* Meet mission objectives without significantly deteriorating the natural or human resources
- \* Increase flexibility to evaluate changing proposed actions
- \* Can evaluate the environmental consequences of alternative implementation scenarios for closure and realignment decisions
- \* Improve resource management
- \* Produce environmental analyses and documents tailored to pertinent environmental issues of the proposed action.

NEPA set forth obligations for environmental protection in federal decision making. As with many federal laws, NEPA implementation was shaped by litigation. This created the perception of NEPA as a set of rigid procedural requirements. This perception combined with the requirements of BRAC, have magnified the difficulties in implementing NEPA.

Base realignment and closure is a dynamic and continuing political reality that must be accommodated. It is important to recognize that NEPA is a flexible process that allows many alternative strategies for addressing the constraints of realignment and closure. Tiering the process, developing a strong implementation plan, and developing environmental baseline information sources are just a few of the strategies to work within the BRAC requirements and overcome the difficulties in preparing environmental analysis. The strategies presented in this report provide a potential framework for decision makers to implement the NEPA process within the constraints of BRAC.

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## Appendix A

## Study Coordination and Approval Form

**Army Environmental Policy Institute, Champaign, Illinois**

☒ **Action Required**

Initiating Office / POC: Mr. Ray Clark

☐ **For Information Only**

Date of Request: 19 Sep 1990

AEPI POC: Mr John Kithipudi

## BACKGROUND

In May 1988, the Defense Secretary's Commission on Base Realignment and Closure was chartered to recommend specific bases which could be realigned or closed. The Department of the Army initiated numerous Environmental Impact Statements designed to comply with the U. S. Army regulation (AR 200-2) for implementation of the National Environmental Policy Act (NEPA).

## STUDY OBJECTIVE

To provide a facilitated forum of senior level environmental professionals in which to explore a systematic approach to full NEPA compliance while surmounting the current condition where a BRAC proposal consistently changes before the record of decision (ROD) can be accomplished. The outcome of this meeting will lead to an AEPT white paper which will explore options to close and realign Army installations while still complying with NEPA.

COORDINATION	SIGNATURE	ACTION	
ACE	<i>[Signature]</i>	<input checked="" type="checkbox"/> Concur	<input type="checkbox"/> Nonconcur
ASA, IL&E	<i>[Signature]</i>	<input checked="" type="checkbox"/> Concur	<input type="checkbox"/> Nonconcur
		<input type="checkbox"/> Concur	<input type="checkbox"/> Nonconcur
		<input type="checkbox"/> Concur	<input type="checkbox"/> Nonconcur
		<input type="checkbox"/> Concur	<input type="checkbox"/> Nonconcur
		<input type="checkbox"/> Concur	<input type="checkbox"/> Nonconcur



## **Appendix B**

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## **Appendix B (continued)**

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## **Appendix C**

### **BRAC NEPA Symposium Strategies**

#### **Scoring**

1= most feasible

10 = least feasible

1. Define each BRAC proposal and carefully write a NEPA document to address that proposal (1.33 ave)

—This will address the "moving target problem"

—Define a broad range of activities and determine their impacts, e.g., impact of 100 additional troops, 1000 additional troops, 10,000 additional troops

—Include in the EIS a proposal to find new uses - seek public involvement

—Make EISs site-specific by identifying installation problems through public involvement, i.e., conduct scoping

—Move EIS responsibility to the installation

2. Create a programmatic EIS document (2.7 ave)

—Preparation time will be 3-6 months

—Document rationale for decisions

—Prepare guidance for tiered analysis of environmental impacts

—This would be used at the Commission level.

3. Create an umbrella description of criteria (4.2 ave.)

—Tailor environmental document

4. Move EIS responsibility to the installation (4.8 ave.)

## **Appendix C (continued)**

### **5. Tailor NEPA EIS process (5 ave.)**

- Tailor NEPA to the constraints and uncertainty of BRAC
- Determine environmental criteria with public involvement

### **6. Determine the environmental carrying capacity of all Army bases and incorporate that information into a programmatic EIS (5.33 ave.)**

### **7. Ensure that the entity that will define the next round of BRAC proposals will receive and use as much useful environmental data as we can possibly generate (5.7 ave.)**

- Create a systematic process to collect environmental data

### **8. Complete and update the Environmental Early Warning System.**

- Incorporate issues pertinent to BRAC (6.2 ave)

### **9. Establish institutional arrangements to facilitate environmentally relevant strategies (6.56 ave.)**

- Create a Pentagon planning group
- Create broader policy analysis and develop criteria for decision making

### **10. Prepare EAs first and then EISs (7.3 ave.)**

- Prepare EA and EIS in all cases
- Create a stand alone socio-economic analysis as part of the EIS
- Incorporate socio-economic analysis into the EIS by reference

## Appendix D

### EEWS Sample User Input

Command?	Model	Typing model allows the system to simulate the movement of personnel and equipment out of Army installation(s).
Will the same units be moved	Yes	<i>Yes</i> moves the same units onto or off of the installation specified. <i>No</i> moves different units onto and/or off of the installation specified.
Unit type	U9003	This is the EEWS designation for the Army unit that will be moved
Number	1	This is the number of units to be moved. Positive number indicates units moving onto the installation and a negative number indicates units moving off of an installation.
Unit Type	Exit	Another unit type could be entered. Exit tells the system there are no more units to be added to the analysis
Installation	Ft. A	Name of installation unit is moving to.
Brief Summary	Yes	<i>Yes</i> displays a brief summary of the ramifications. <i>No</i> displays detailed information for individual topic areas.

## **Appendix D (continued)**

### **EEWS Sample Output**

<b><u>Topic Area</u></b>	<b><u>Fl A</u></b>
Housing	Problem
Coastal Zones	Problem
Schools	No Problem
Maneuver Area	Problem
Smokes/Obscurences	No Problem
Ranges Needed	Problem
Historical/Archeological	No Problem
Utilities	No Problem
Endangered Species	No Problem

### **List of Available Installations on EEWS**

Yakima	McPherson
Wainwright	McCoy
Stewart	Irwin
Sheridan	Indiantown
Sam Houston	Hunter Liggett
Roberts	Hunter Army Air
Riley	Hood
Richardson	Greely
Presidio SF	Drum
Polk	Devens
Oakdale	Chaffee
Meade	Carson
Carson	Buchanan
Campbell	Bragg
Bullis	Bliss (TRADOC)
A.P. Hill	Benning (TRADOC)
Lewis	

## **Acronym Glossary**

<b>AAP</b>	<b>Army Ammunition Plant</b>
<b>ACE</b>	<b>Army Corps of Engineers</b>
<b>AEPI</b>	<b>Army Environmental Policy Institute</b>
<b>AR</b>	<b>Army Regulation</b>
<b>ASA</b>	<b>Assistant Secretary of the Army</b>
<b>BRAC</b>	<b>Base Realignment and Closure</b>
<b>BRAC-NEPA</b>	<b>Base Realignment and Closure relating to the National Environmental Policy Act</b>
<b>BRACO</b>	<b>Base Realignment and Closure Office</b>
<b>CERL</b>	<b>Construction Engineering Research Laboratory</b>
<b>CFR</b>	<b>Code of Federal Regulations</b>
<b>COL</b>	<b>Colonel</b>
<b>DEIS</b>	<b>Draft Environmental Impact Statement</b>
<b>DMA</b>	<b>Defense Mapping Agency</b>
<b>EA</b>	<b>Environmental Assessment</b>
<b>EESC</b>	<b>Executive Environmental Steering Committee</b>
<b>EEWS</b>	<b>Environmental Early Warning System</b>
<b>EIAP</b>	<b>Environmental Impact Assessment Process</b>
<b>EIFS</b>	<b>Environmental Impact Forecast System</b>
<b>EIS</b>	<b>Environmental Impact Statement</b>
<b>FORSCOM</b>	<b>Forces Command</b>
<b>FY</b>	<b>Fiscal Year</b>
<b>GRASS</b>	<b>Geographic Resource Analysis Support System</b>
<b>GSA</b>	<b>General Services Administration</b>
<b>HASC</b>	<b>House Armed Services Committee</b>

### **Glossary (continued)**

HQDA	Headquarters Department of the Army
IL&E	Installations, Logistics, and Environment
ITAM	Integrated Training Area Management
LTG	Lieutenant General
MACOM	Major Command
MAJ	Major
NEPA	National Environmental Policy Act
NG	National Guard
NOI	Notice of Intent
OASA	Office of the Assistant Secretary of the Army
OCE	Office, Chief of Engineers
OCONUS	Outside Continental United States
OEA	Office of Economic Assessment
PDEIS	Preliminary Draft Environmental Impact Statement
ROD	Record of Decision
USARC	United States Army Reserve Center



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**Logistics & Environment 13. *See also* Office of the**

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